

Amendments In the Claims

Please cancel Claims 3, 11, and 18. Please amend claims 1, 9, 16, 23, 24, 25, 26, 27, 28 and 29 as follows:

1. (Currently Amended) A method of collecting network traffic data comprising:
receiving a group of information;
determining whether to process the group of information for network traffic data collection ~~according to a sample algorithm, wherein~~
~~said determining is performed according to a sampling algorithm that is~~
~~selected from one of~~
~~a linear sampling algorithm,~~
~~an exponential sampling algorithm,~~
~~a natural log sampling algorithm,~~
~~a burst sampling algorithm, and~~
~~selecting the group of information based on an examination of traffic~~
~~attribute data in the group of information;~~
processing the group of information for network traffic data collection if the determination is to process the group of information; and
forwarding the group of information to a destination.
2. (Original) The method of Claim 1 wherein the group of information is an IP packet.
3. (Canceled)
4. (Original) The method of Claim 1 wherein forwarding the group of information to the destination comprises:
identifying the destination using a forwarding table;
if the destination is in the forwarding table, automatically forwarding the group of information to the destination; and
otherwise sending the group of information to one or more processing engines to determine routing to the destination and forwarding the group of information according to the determined routing.

5. (Original) The method of Claim 1 wherein forwarding the group of information to the destination is performed after processing the group of information.

6. (Previously Presented) The method of Claim 1 wherein the processing of the group of information for network traffic data collection comprises:

determining if the group of information is part of one or more recorded traffic flows;
creating a new entry in a table if the group of information is not part of the one or more recorded traffic flows;

incrementing a field in an existing entry in the table if the group of information is part of the one or more recorded traffic flows; and
time stamping the group of information.

7. (Previously Presented) The method of Claim 6 wherein the processing of the group of information for network traffic data collection further comprises:

creating a traffic information packet; and
transmitting the traffic information packet to a network traffic data collection application.

8. (Original) The method of Claim 7 wherein the traffic information packet comprises a header and one or more flow records.

9. (Currently Amended) An apparatus for collecting network traffic data comprising:

means for receiving a group of information;

means for determining whether to process the group of information for network traffic data collection according to a sample algorithm, wherein
the means for determining comprises a means for sampling selected from one

of

a means for linear sampling,

a means for exponential sampling,

a means for natural log sampling,

a means for burst sampling, and

a means for selecting the group of information based on an examination of traffic attribute data in the group of information;

means for processing the group of information for network traffic data collection if the determination is to process the group of information; and means for forwarding the group of information to a destination.

10. (Original) The apparatus of Claim 9 wherein the group of information is an IP packet.

11. (Canceled)

12. (Original) The apparatus of Claim 9 wherein the means for forwarding the group of information to the destination comprises:

means for identifying the destination using a forwarding table;
means for automatically forwarding the group of information to the destination if the destination is in the forwarding table; and
means for sending the group of information to one or more processing engines to determine routing to the destination and then forward the group of information according to the determined routing otherwise.

13. (Previously Presented) The apparatus of Claim 9 wherein the means for processing of the group of information for network traffic data collection comprises:

means for determining if the group of information is part of one or more recorded traffic flows;
means for creating a new entry in a table if the group of information is not part of the one or more recorded traffic flows;
means for incrementing a field in an existing entry in the table if the group of information is part of the one or more recorded traffic flows; and
means for time stamping the group of information.

14. (Previously Presented) The apparatus of Claim 13 herein the means for processing of the group of information for network traffic data collection further comprises: means for creating a traffic information packet; and means for transmitting the traffic information packet to a network traffic data collection application.

15. (Original) The apparatus of Claim 14 wherein the traffic information packet comprises a header and one or more flow records.

16. (Currently Amended) A network node for collecting network traffic data having one or more processing engines and a memory comprising a set of instructions to:

receive a group of information;

determine whether to process the group of information for network traffic data collection

according to a sample algorithm, wherein

the set of instructions to determine comprises a sampling algorithm that is

selected from one of

a linear sampling algorithm,

an exponential sampling algorithm,

a natural log sampling algorithm,

a burst sampling algorithm, and

selecting the group of information based on an examination of traffic

attribute data in the group of information;

process the group of information for network traffic data collection if the determination is

to process the group of information; and

forward the group of information to the destination.

17. (Original) The network node of Claim 16 wherein the group of information is an IP packet.

18. (Canceled)

19. (Original) The network node of Claim 16 wherein the set of instructions to forward the group of information to the destination comprises a set of instructions to:

identify the destination using a forwarding table;
if the destination is in the forwarding table, automatically forward the group of information to the destination; and
otherwise send the group of information to one or more processing engines to determine routing to the destination and forward the group of information according to the determined routing.

20. (Previously Presented) The network node of Claim 16 wherein the set of instructions to process the group of information for network traffic data collection comprises a set of instructions to:

determine if the group of information is part of one or more recorded traffic flows;
create a new entry in a table if the group of information is not part of the one or more recorded traffic flows;
increment a field in an existing entry in the table if the group of information is part of the one or more recorded traffic flows; and
time stamp the group of information.

21. (Previously Presented) The network node of Claim 20 wherein the set of instructions to process the group of information for network data collection further comprises a set of instructions to:

create a traffic information packet; and
transmit the traffic information packet to a network traffic data collection application.

22. (Original) The network node of Claim 21 wherein the traffic information packet comprises a header and one or more flow records.

23. (Currently Amended) ~~An apparatus for collecting network traffic data A router~~ comprising:

~~one or more route processors;~~
~~one or more switch fabrics coupled to the one or more route processors;~~
one or more destination line cards coupled to the one or more switch fabrics;
a source line card coupled to one of the one or more switch fabrics, wherein ~~the source line card~~

the source line card receives a data packet group-of-information;
a router processor, coupled to the switch fabric, and configured to
determines whether to process the data packet group-of-information for
network traffic data collection according to a sample algorithm;
processes the data packet group-of-information for network traffic data
collection if the determination is to process the data packet group-of
information; and
forwards the data packet group-of-information to one of the one or more
destination line cards.

24. (Currently Amended) The apparatus of Claim 23 wherein the data packet
group-of-information is an IP packet.

25. (Currently Amended) The apparatus of Claim 23 wherein the sample algorithm
is selected from one of a linear sampling algorithm, an exponential sampling algorithm, a
natural log sampling algorithm, a burst sampling algorithm, and selecting the data packet
based on an examination of traffic attribute data in the data packet traffic attribute.

26. (Currently Amended) The apparatus of Claim 23 wherein to forward the data
packet group-of-information to one of the one or more destination line cards, the source line
card:

identifies the one of the one or more destination line cards using a forwarding table;
if the one of the one or more destination line cards is in the forwarding table,
automatically forwards the data packet group-of-information to the one of the
one or more destination line cards; and
otherwise sends the data packet group-of-information to one or more the router
processors to determine routing to one of the one or more destination
line cards and then forwards the data packet group-of-information according to
the determined routing.

27. (Currently Amended) The apparatus of Claim 26 wherein the router processor
one or more processing engines is located on the source line card.

28. (Currently Amended) The apparatus of Claim 23 wherein to process the data packet group-of information for network traffic data collection, the source line card:
determines if the data packet group-of information is part of one or more recorded traffic flows;
creates a new entry in a table if the data packet group-of information is not part of the one or more recorded traffic flows;
increments a field in an existing entry in the table if the data packet group-of information is part of the one or more recorded traffic flows; and
time stamps the data packet group-of information.
29. (Currently Amended) The apparatus of Claim 28 wherein to process the data packet group-of information for network traffic data collection, the source line card further:
creates a traffic information packet; and
transmits the traffic information packet to a network traffic data collection application.
30. (Original) The apparatus of Claim 29 wherein the traffic information packet comprises a header and one or more flow records.